MANAGEMENT PLAN

November, 1996

for Soap Lake Ecological Reserve

BRITISH COLUMBIA

Ministry of Environment, Lands and Parks
BC Parks Department

105-03587/

Soap Lake
Ecological Reserve

MANAGEMENT PLAN

Prepared by
BC Parks Kamloops Area Pilot Project Team
for Thompson River District
Kamloops, B.C.

BC Parks

Ministry of Environment, Lands and Parks

BC Parks
Kamloops, BC

APPROVALS

Kamloops Area Management Planning Pilot Project
Binder Approvals Page

Forward

This binder contains 16 management plans developed under the Kamloops Area Management Planning Pilot Project. This project began in 1994 to develop, implement and evaluate a systems approach to management planning. The project concluded in October, 1996. The management plans contained in this binder provide long-term direction for a group of 10 Class A parks, five ecological reserves and one recreation area. The intention is to review this binder and the plans contained here at regular intervals. Plan vision statements and objectives will not change extensively over time. Management actions, however, will change as priorities, funding and support resources come available.

- ☐ Coldwater River Park
- ☐ Goldpan Park
- ☐ Juniper Beach Park
- ☐ Lac Le Jeune Park
- ☐ Marble Canyon Park
- ☐ McConnell Lake Park
- ☐ McQueen Creek Eco. Res.
- ☐ Monck Park
- ☐ Paul Lake Park
- ☐ Skihist Eco. Res.
- ☐ Skihist Park
- ☐ Skwaha Lake Eco. Res.
- ☑ Soap Lake Eco. Res.
- ☐ Steelhead Park
- ☐ Tranquille Eco. Res.
- ☐ Walloper Lake

Approved by:

District Manager
Thompson River District
BC Parks Department

Assistant Deputy Minister
Park Management Committee
BC Parks Department

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I. Introduction

As outlined in the Ecological Reserve Act of 1971, ecological reserves are set aside for the following purposes:

- Scientific research and educational use
- Representation of natural ecosystems
- Study of recovery processes after modification by man
- Protection of rare and endangered native plants and animals in their natural habitat
- Protection of other unique and rare botanical, zoological or geological phenomena.

Management of ecological reserves is therefore concerned primarily with strict protection of the resources themselves and with the provision of those research and educational opportunities which will not harm or diminish these resources.

Recreation and tourism are not supported in ecological reserves, although public access for non-consumptive, observational activities is tolerated, provided no significant resource impact results from it.

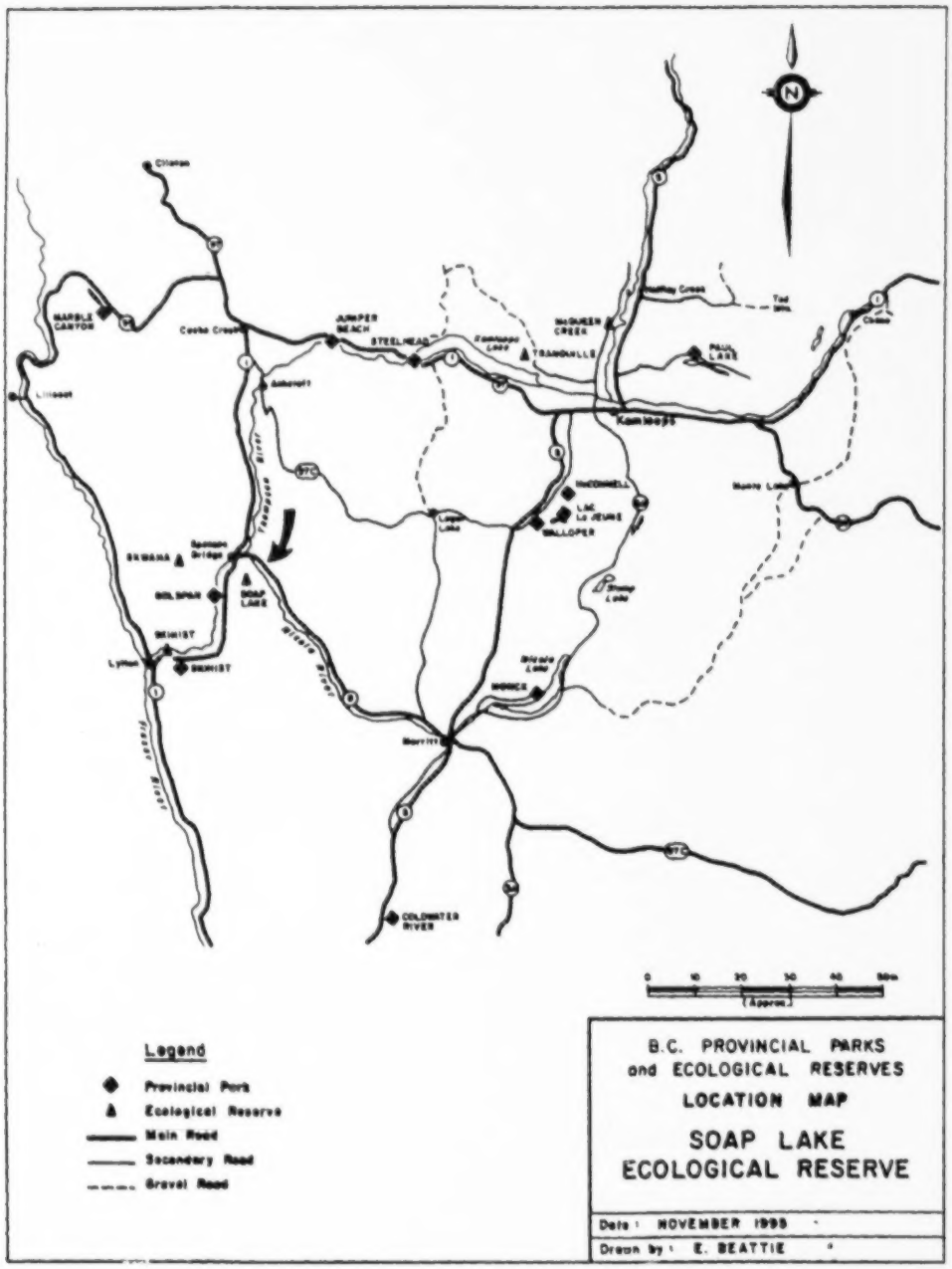
Purpose of the Management Plan

This plan states the role of the ecological reserve in the provinc[illegible]stem, the long-term vision for the ecological reserve and the management objectives and actions [illegible]achieve this vision. The ecological reserve role and objectives as stated in this plan canno[illegible]ontravened in meaning or intent without consultation with the public and approval by the district manager and BC Parks Management Committee (PMC). The five year business plan is subject to annual review and adjustments.

II. Background Summary

Natural Features

- Reserve size 884 ha; located between 900 and 1200 m elevation. Boundaries follow quarter-section lines.
- Special features of reserve: Major alkaline lake and associated unusual plant and animal life
- Representative features of reserve: Forests of the Dry Cool Interior Douglas-fir (IDFdk1) and grasslands of the Very Dry Hot Interior Douglas-fir (IDFxh2) Biogeoclimatic Variants. Tree cover Douglas-fir, Ponderosa pine, lodgepole pine, minor aspen and birch. All wildlife typical for the IDF Zone is present.
- Geology: Main bedrocks cretaceous volcanics; surficial deposits morainal, colluvial (both on slopes), and lacustrine (lake basin).
- Water: Soap Lake and adjacent alkaline ponds are shallow, with large marginal salt flats following dry spells. A spring issues from the margin of the northeastern end of the lake and is the only water source for grazing animals, except for a small pond 0.8 km to the north.


Legend
Provincial Park
Ecological Reserve
Main Road
Secondary Road
Gravel Road
B.C. PROVINCIAL PARKS
and ECOLOGICAL RESERVES
LOCATION MAP
SOAP LAKE
ECOLOGICAL RESERVE
Date : NOVEMBER 1988
Drawn by : E. BEATTIE

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Traditional Uses

- The lake's alkaline and sulphur-rich mud, as well as the mineral-rich spring water were used by local First Nations for medicinal purposes. Traditional plant gathering and hunting is said to take place in the reserve.

Early Administrative History

- Land applied for in 1917 and 1927 for resort/bathing/medicinal uses. Under mineral claims for sodium carbonate extraction. Reserve for the use, recreation, and enjoyment of the public (UREP) after 1958.

Ecological Reserve History

- Applied for in 1969 and established as reserve in 1971 by order-in-council #1565.
- Through apparent oversights in referrals a pre-existing grazing permit was not amended to exclude the reserve area.
- Reserve area excluded from grazing permit in 1991.

Management Issues

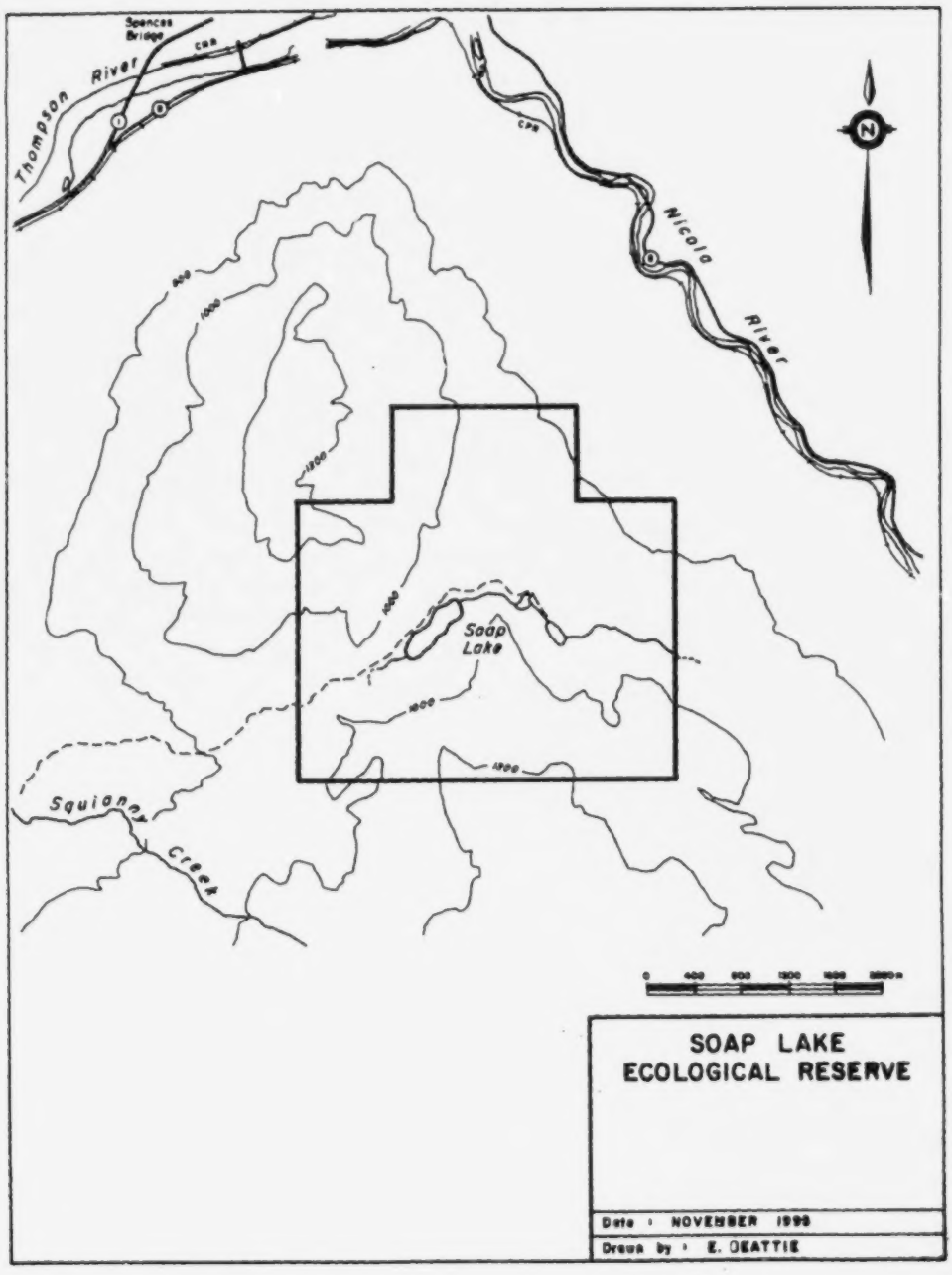
- Grassland and transitional ecosystem types severely damaged by overgrazing. Native grasses greatly reduced in frequency and cover.
- Riparian areas heavily trampled by cattle.
- Exclusion of reserve area from grazing not enforceable without offering alternate cattle watering area and without full cooperation of permittee and Range Branch.
- No effective requirement of permittee to prevent cattle fom straying into no-grazing area under present range rules.
- Role of wildfires in shaping present vegetation patterns and risks of major fires through fuel build-ups.
- Contingency/policy for potential forest pest and disease infestations.
- Spread of noxious weeds along access road. Spotted knapweed reported advancing inside reserve, diffuse knapweed on both ends of reserve. Ready seedbed in overgrazed grassland portions of reserve.
- Hunting reported repeatedly inside reserve.
- Trespass use of vehicles in reserve. Disturbance of alkaline flats and lake margins through off-road driving
- Access to ER boundaries difficult and dangerous through poor road conditions (Drynoch Slide above Trans Canada Highway).
- Wilful removal of ecological reserve signs.

Research and Educational Use

- Five benchmark cattle exclosures established in the reserve in 1990 for monitoring and research.
- Biological baseline inventory of reserve's contents incomplete
- Possible educational use of reserve restricted by difficult access.

Surrounding Land Use

- Logging: No activities at present
- Grazing: See above
- Recreation: 4-wheel driving and hunting


Spences Bridge
CNR
Thompson River
CPR
Nicola River
N
400
1000
1200
800
Soap Lake
900
1400
Squiaay Creek
SOAP LAKE
ECOLOGICAL RESERVE
Date : NOVEMBER 1998
Drawn by : E. BEATTIE

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III. Role and Long-Term Vision

The major roles of this reserve are to conserve representative ecosystems and the special alkaline lake features, and to provide research opportunities.
According to its size, representative, and special features, Soap Lake is potentially one of the most significant reserves in the region. With the exception of high-elevation reserves, it is the largest ecological reserve in the southern interior.
In the context of the Protected Areas Strategy (PAS) this reserve has been designated to provide part of the representation of two variants of the Interior Douglas-fir Biogeoclimatic Zone (IDFdk1 and IDFxh2) within the Pavilion Ranges Ecosection. A "Soap Lake extension area of interest" with a total of over 4500 ha (including the ER) is under discussion in the PAS planning process. Soap Lake would be the logical, strictly protected core of such an enlarged conservation area.

The long-term vision for this reserve is an area unencumbered by, and fully protected from present non-conforming uses and disturbances, an area where natural vegetation development occurs unimpeded and which will eventually return to fully representative species combinations, particularily in the grassland portions and the community zonations typically found around alkaline sites. Truly traditional uses in the area will be unimpeded and, in the case of native plants, enhanced by the recovery of the native vegetation cover.

In the medium and long term major research opportunities will offer themselves in connection with ecosystem recovery processes, particularily in vegetation. Educational opportunities in connection with the alkaline lake, traditional uses, benchmark and recovery functions, will also become available.

IV. Management Objectives

Grazing

Objective: Cattle grazing inside the reserve will gradually be reduced, with a long-term goal of being phased out.

Fire

Objective: Maintain a near-natural pattern of fire-induced successional stages in grassland and forests.

Traditional Uses

Objectives: Permit traditional uses by local First Nations people without compromising conservation values in the reserve.

Introduced Plant Species

Objective: Establishment of noxious weed species will be controlled/prevented with manual and biological methods where possible. Chemical weed control will only be used in exceptional cases and all weed control will be carried out as part of research projects.

Forest Pests and Diseases

Objective: Native pests and diseases will be considered part of the ecosystem and allowed to take their course.

Research and Education

Objective: Provide opportunities and support for non-consumptive/non-destructive research in the reserve.

APPENDIX A 5 YEAR BUSINESS PLAN

Soap Lake Ecological Reserve

Goal:	Protect ecological reserve values.
Action:	Continue to meet with Cook's Ferry Band to develop a management plan which includes their concerns.
Goal:	To eliminate cattle grazing from the reserve.
Action:	In cooperation with the Forest Service and Cook's Ferry Band establish watering holes outside the reserve.
Goal:	Identify reserve boundaries and inform public about role of reserve within the Provincial Park system.
Action:	Install new signage.
Goal:	Reduce noxious weed encroachment along roads in reserve.
Action:	Implement a noxious weed control program.
Goal:	Maintain a 5 year vegetation monitoring program on cattle exclosures.
Action:	Re-survey vegetation monitoring plots.
Goal:	Develop a heritage inventory of the reserve.
Action:	Obtain funding through other agencies.
Goal:	Protect / enhance ecological reserve values through fire management.
Action:	Develop a fire management strategy.